



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,294	07/24/2003	Kitchener Clark Wilson	P03-KITCH-0044	1869
34744	7590	09/05/2006	EXAMINER	
THE LAW OFFICE OF RICHARD S ERBE P.O. BOX 418 5380 SENECA PLACE SIMI VALLEY, CA 93062			GONZALEZ, JULIO C	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 89, 92, 93, 94, 99, 102, 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett (US 4,504,761) in view of Breed et al (US 6,662,642).

Triplett discloses a device for obtaining energy from tire 38 and a piezoelectric device 112 being mounted on the inner walls of the tire 38 and the piezoelectric device responds to the deflections of the tire (see abstract). However, Triplett does not disclose having a base plate.

On the other hand, Breed et al discloses for the purpose of monitoring economically and efficiently the conditions of a tire, a base plate 137 being attached to a device 40, 135 within a tire (see figure 9B). Moreover, the device 135 can be adapted to be embedded in the tire (see figure 3A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a device for obtaining energy as disclosed by

Triplett and to use a base plate for the purpose of monitoring economically and efficiently the conditions of a tire as disclosed by Breed et al.

3. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 89 above, and further in view of Balzer et al (US 6,462,650).

The combined device discloses all of the elements above. However, the combined device does not disclose an adhesive patch.

On the other hand, Balzer et al discloses for the purpose of improving the durability of the system, an adhesive patch 30 being associated with a base plate E (see figure 1; column 6, lines 48-56). Moreover, it is disclosed that fasteners 20, 22 are used (column 6, lines 56-67) and a substrate being attached to a tire by using a base plate (column 3, lines 45-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by using an adhesive patch for the purpose of improving the durability of the system as taught by Balzer et al.

4. Claims 98, 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett, Breed et al and Balzer et al as applied to claim 97 above, and further in view of Koch et al (US 5,573,611).

The combined device discloses all of the elements above. However, the combined device does not disclose that a patch covers a base and contacts an inner wall of a tire.

On the other hand, Koch et al discloses for the purpose of monitoring effectively the conditions of a tire, electronic devices 17 being located on a base and the base contacting the inner wall of tire 5 and a patch 80 having a surface overlaying the surface of the base (see figure 7) and device being sandwiched between the patch 80 and tire surface 5. Moreover, the patch 80 has an aperture 84 (see figures 7, 9, 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to have a device between a patch and a tire surface for the purpose of monitoring effectively the conditions of a tire as disclosed by Koch et al.

5. Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 89 above, and further in view of Thomas (US 4,405,872).

The combined device discloses all of the elements above. However, the combined device does not disclose that the energy converter has a magnet and a coil.

On the other hand, Thomas discloses for the purpose of providing a reliable and inexpensive way of generating electricity in a tire, a magnet 26 and coil 38 (see figures 4, 5) and moving the magnet and the coil relative to each other (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to modify the invention by using a magnet and a coil for the purpose of providing a reliable and inexpensive way of generating electricity in a tire as disclosed by Thomas.

6. Claims 90, 96, 100, 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Triplett and Breed et al as applied to claims 89, 99 above, and further in view of Margolis et al (US 5,570,286).

The combined device discloses all of the elements above. However, the combined device does not disclose taking into consideration the pulse width of a signal.

On the other hand, Margolis et al discloses for the purpose of achieving optimum performance of a regenerative system that pulse width is taken into account when managing energy sources (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined device as disclosed above and to take into account the pulse width discloses for the purpose of achieving optimum performance of a regenerative system as disclosed by Margolis et al.

Allowable Subject Matter

7. Claims 30, 31, 59, 60, 81, 82, 87 are allowed.
8. Claims 91, 101 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 07/19/06 have been fully considered but they are not persuasive.

Triplett and Breed et al inherently teach using electronic devices in combination with the production of energy since piezoelectric devices use converters (Triplett, column 1, lines 33-38) and Breed et al, due to the broadness of the claims, discloses using two capacitors for storing energy (Breed et al, column 28, lines 61-65). For such reasons, the Prior Art still applies to the rejected claims.

Conclusion

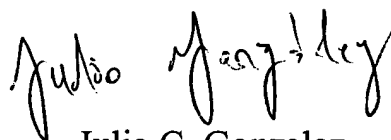
10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julio C. Gonzalez
Primary Examiner
Art Unit 2834

Jcg

September 1, 2006